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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,392

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EXAMINER

KUCAB, JAMIE R

ART UNIT

PAPER NUMBER

3621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/789,392	Applicant(s) SMITH ET AL.	
	Examiner JAMIE KUCAB	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/14/06, 9/4/07, 12/5/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. This action is responsive to the following communications: Applicant's response filed July 9, 2008.
2. Claims 1-21 are pending in the application.
3. This Office Action is given Paper No. 20081020 for reference purposes only.
4. Based on a comparison of the PGPub 2005/0192877 with applicant's originally submitted specification, the PGPub appears to be a fair and accurate record of the applicant's specification. Therefore, if necessary any references in this action to applicant's specification refer to paragraph numbers in the PGPub.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-21 are rejected under 35 U.S.C. §101, because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent and recent Federal Circuit decisions, a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). The process steps of "specifying..." (claim 1), generating..." (claim 1), "providing..." (claim 1),

“providing...” (claim 1), “requesting...” (claim 1), “providing...” (claim 14), “receiving...” (claim 14), “receiving...” (claim 14), “providing...” (claim 14), and “requesting...” (claim 14) are not tied to another statutory class nor do they execute a transformation. Thus, they are non-statutory. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-21 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Regarding claims 1 and 14, it is unclear whether the various method steps are performed by the provider, the consumer, the service intermediary, or another actor. Nor would it have been clear to one of ordinary skill in the art at the time the invention was made. Appropriate clarification and/or correction is required.

10. Regarding claims 2, 3, 15, and 16, Applicant’s recitations “based on willingness of the service provider to be exposed to non-payment by that service consumer” and “indicates the number of services for which the service provider is willing to be exposed

to non-payment by the service consumer” would have been unclear to a person having ordinary skill in the art at the time of the invention. Appropriate clarification and/or correction is required.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 4-6, 12, 13, and 17, as understood by the Examiner, are rejected under 35 U.S.C. §103(a) as being unpatentable over Briscoe et al. (US Patent 6,341,273) in view of either Frankel et al. (US Patent 7,184,988, hereinafter “Frankel”) or Hauser et al. (Ref U on the attached form PTO-892, hereinafter “Hauser”).

13. Regarding claims 1 and 5, Briscoe discloses all the elements of the claimed invention including:

- a. specifying a number of services within a billing unit for the service provider and the service consumer (“set number of times,” C1 L63 - C2 L24);
- b. generating a sequence of codes (“the hash chain”) from a start code (“secret random number”) to an end code (“value at the end of the hash chain”), the number of codes in the sequence corresponding to the specified number of services within the billing unit (“set number of times,” C1 L63 - C2 L24);

- c. when the service consumer requests a service of the service provider, providing to the service provider one of the codes of the sequence from which the end code can be derived ("the user communicates to the vendor the value at the end of the hash chain," C1 L63 - C2 L24); and
 - d. when the service provider has been provided by the service consumer with the start code, requesting payment for the billing unit ("The vendor may collect the money owed to it at any time by communicating the last revealed hash value to the broker's settlement interface," C7 L5-9).
14. However, although Briscoe discloses providing the end code to the service provider ("the user communicates to the vendor the value at the end of the hash chain," C2 L6-7), Briscoe fails to explicitly disclose providing the end code to the service provider via a service intermediary.
15. Both Frankel and Hauser teach selecting the start code, generating a sequence of codes (hash chain), and providing the end code to the service provider via a service intermediary (Frankel, Fig. 1 and associated text, C10 L15-21; Hauser, pgs. 2-7).
16. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Briscoe to include the start code selection, code sequence generation, and provision of the end code to the service provider via a service intermediary of Frankel or Hauser in order to achieve the predictable result of reducing computational complexity for the service intermediary and distributing the computations required to calculate the hash chain to the individual service consumers.

17. Regarding claim 4, Briscoe further discloses wherein the sequence of codes is generated by the service consumer ("The user then uses a publicly known hash function to operate on the serial number to produce a first hash value, and then operates on the first hash value with the hash function to produce a second hash value, and so on," C1 L63 - C2 L24).

18. Regarding claims 6 and 17, Briscoe further discloses wherein the sequence is generated using a one-way function ("The user then uses a publicly known hash function ... The one-way nature of the hash function," C1 L63 - C2 L24).

19. Regarding claim 12, Briscoe further discloses wherein the service intermediary ("the broker") generates the sequence ("the broker generates a number of hash chains," C8 L21-22).

20. Regarding claims 13 and 14, Briscoe further discloses wherein the service provider provides services requested by the service consumer ("The vendor now delivers the goods to the client," C6 L48).

21. Claims 2, 3, 7-11, 15, 16, 18-21, as understood by the Examiner in light of the above 112 2nd paragraph rejections, are rejected under 35 U.S.C. 103(a) as being unpatentable over Briscoe/Frankel or Briscoe/Hauser and further in view of Examiner's Official Notice.

22. Regarding claims 2, 3, 7, 11, 15, 16, 18, although Briscoe discloses specifying different numbers of services for billing units, the combination of Briscoe/Frankel or Briscoe/Hauser does not disclose doing so for different customers based on the risk tolerance of the provider or in order to minimize transaction costs. However, the

Examiner takes Official Notice that it was old and well known in the art at the time of the invention for a business to calculate the amount of credit it is willing to extend and quantity of service per billing unit it is willing to provide based on risk tolerance and transaction costs because to do otherwise would negatively impact the profitability of a company. Therefore, it would have been obvious to combine the varying services per billing unit based on risk tolerance and transaction costs of Examiner's Official Notice with the system of Briscoe/Frankel or Briscoe/Hauser in order to achieve the predictable result of increasing profitability by reducing risk of credit default and decreasing the amount of transaction costs incurred.

23. Regarding claims 8-10 and 19-21 Briscoe/Frankel or Briscoe/Hauser disclose all the elements of the claimed invention including that the service intermediary ("the bank") resolves disputes (Briscoe, "The bank checks that the value is that expected for the tenth hash value generated from the relevant random secret number," C1 L63 - C2 L24). But both Briscoe/Frankel and Briscoe/Hauser fail to explicitly disclose resolving the dispute one way or the other based on the result of the hash value check. However, the Examiner takes Official Notice that it was old and well known in the art at the time of the invention for a trusted third party or intermediary to resolve disputes in favor of the party that the evidence favors in order to maintain the trust of both parties. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Briscoe/Frankel or Briscoe/Hauser to include the dispute resolution based on evidence of Examiner's Official Notice in order to promote trust of and thereby use of the intermediary.

Double Patenting

24. Claims 1-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-40 of copending Application No. 10/789,808. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the positively recited method steps of claims 1-21 are disclosed in claims 1-40 of the copending application.

25. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Examiner Note

26. The Examiner has cited particular columns, line, and/or paragraph numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the Applicant, in preparing responses, to fully consider a reference in its entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claim Interpretation

27. Independent claims (1 and 14) are examined together, since they are not patentably distinct. If Applicant expressly states on the record that two or more independent and distinct inventions are claimed in this application, the Examiner may require the applicant to elect an invention to which the claims will be restricted.

28. Any Official Notices taken by the Examiner that are not adequately traversed by Applicant will be taken to be admitted prior art.

29. Regarding claims 1, 8, 9, 10, 14, and 19-21, the USPTO interprets claim limitations that contain statements such as "*if, may, might, can, could, when, potentially, possibly*", as optional language (this list of examples is not intended to be exhaustive). As matter of linguistic precision, **optional claim elements do not narrow claim limitations**, since they can always be omitted (*In re Johnston*, 77 USPQ2d 1788 (Fed. Circ. 2006)). They will be given less patentable weight, because language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. In the interest of compact prosecution, the optional elements of the above-identified claims have been treated as positive limitations where possible in anticipation of an amendment by Applicant to make them positive limitations.

Conclusion

30. References considered pertinent to Applicant's disclosure are listed on form PTO-892. All references listed on form PTO-892 are cited in their entirety.

31. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jamie Kucab whose telephone number is 571-270-3025. The Examiner can normally be reached on Monday-Friday 9:30am-6:00pm EST.

32. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK

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